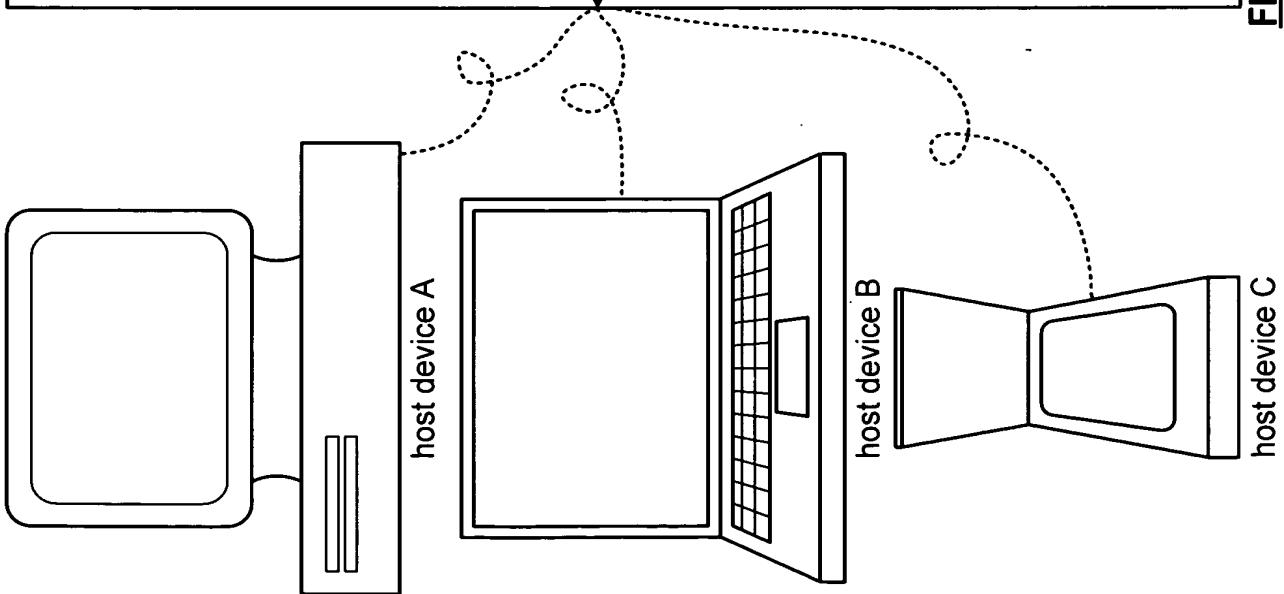


FIG. 1



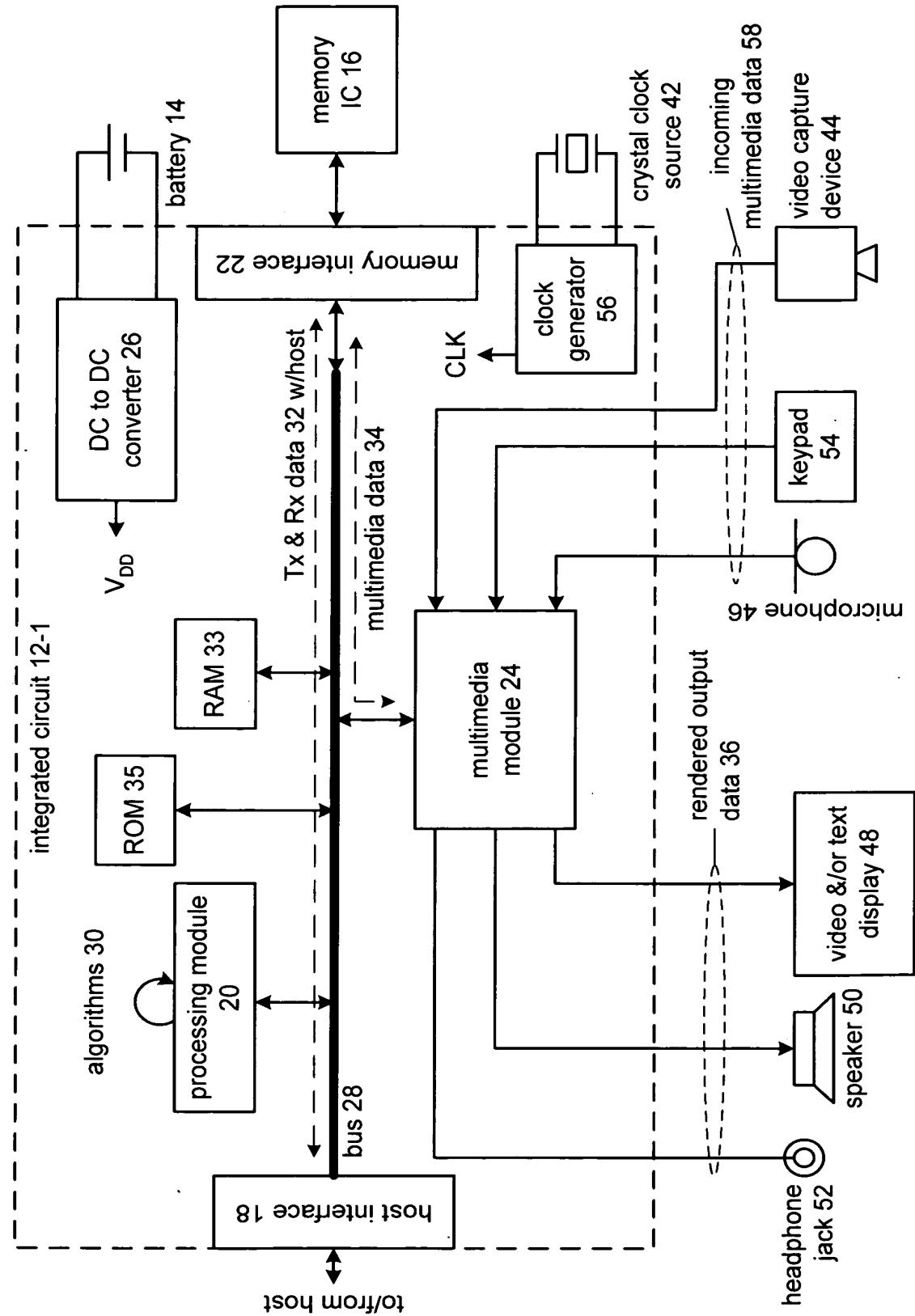


FIG. 2
multi-function handheld device 40

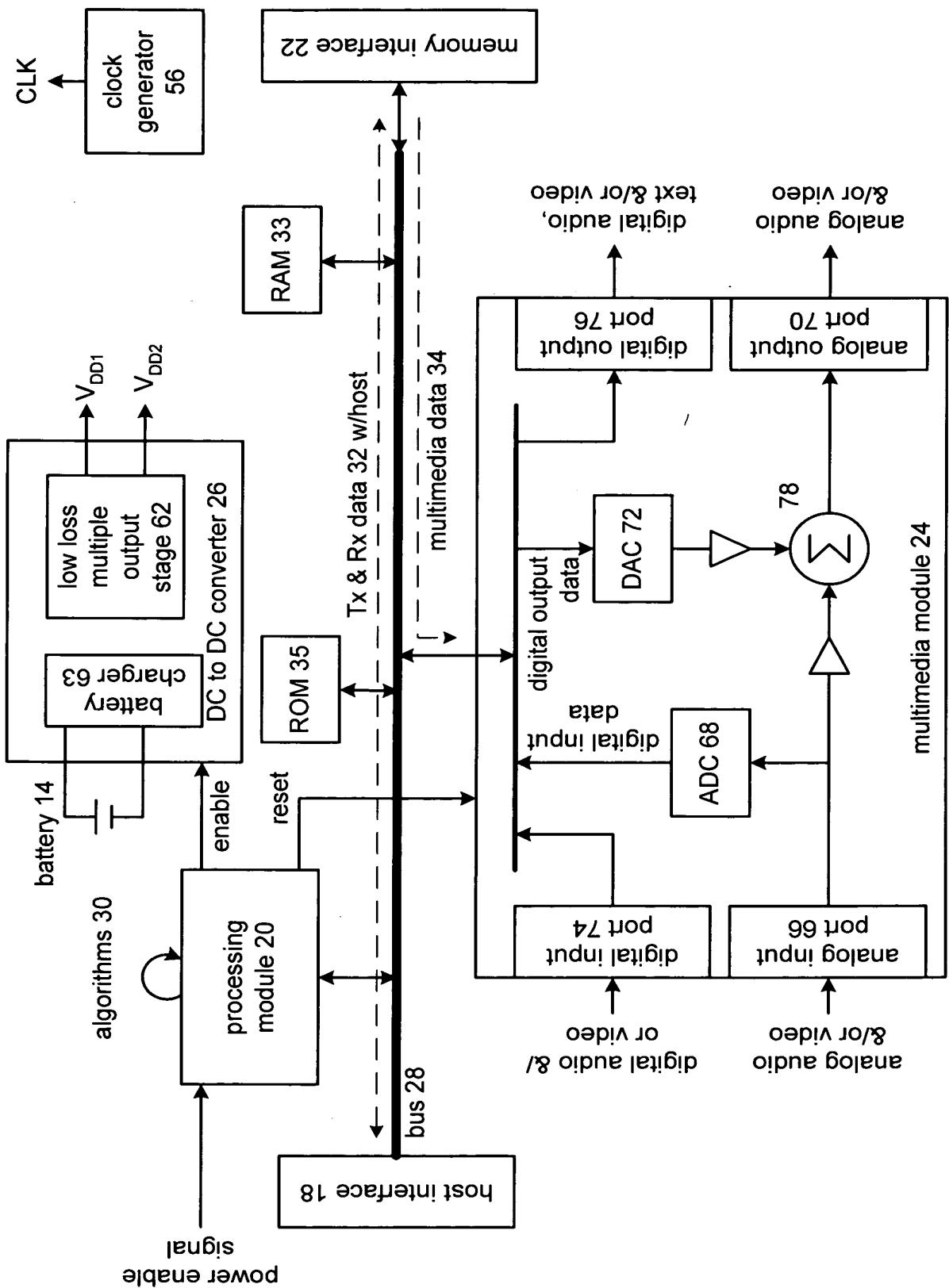


FIG. 3
integrated circuit 12-2

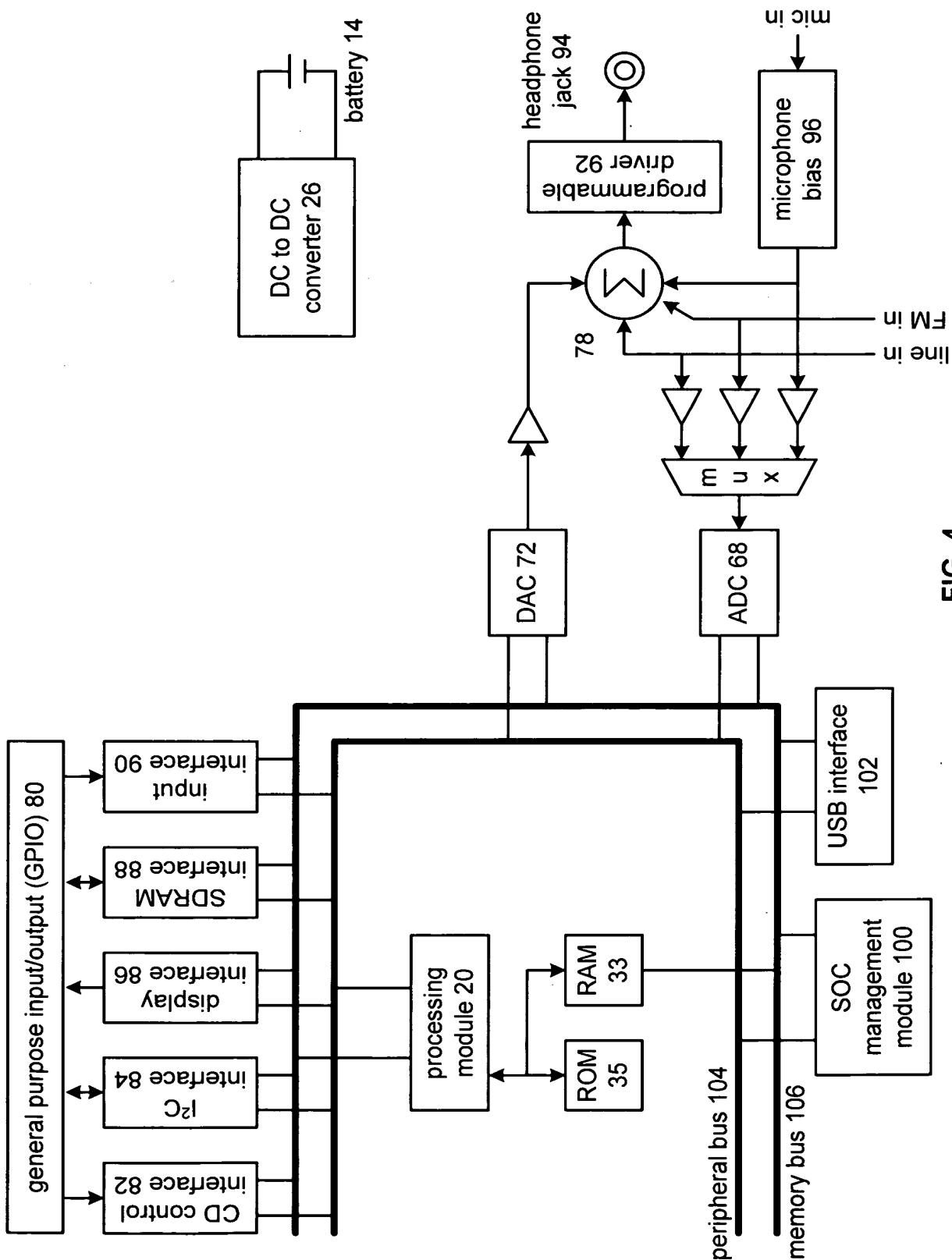


FIG. 4
integrated circuit 12-3

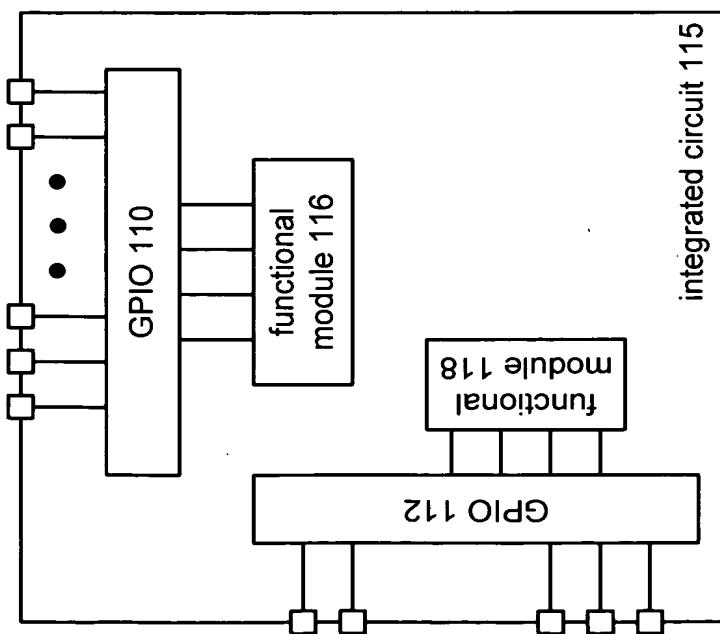


FIG. 5

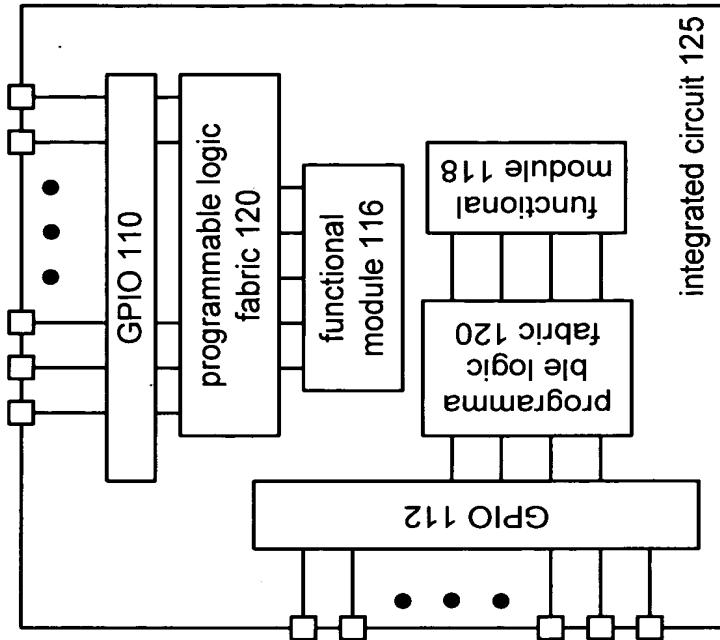


FIG. 6

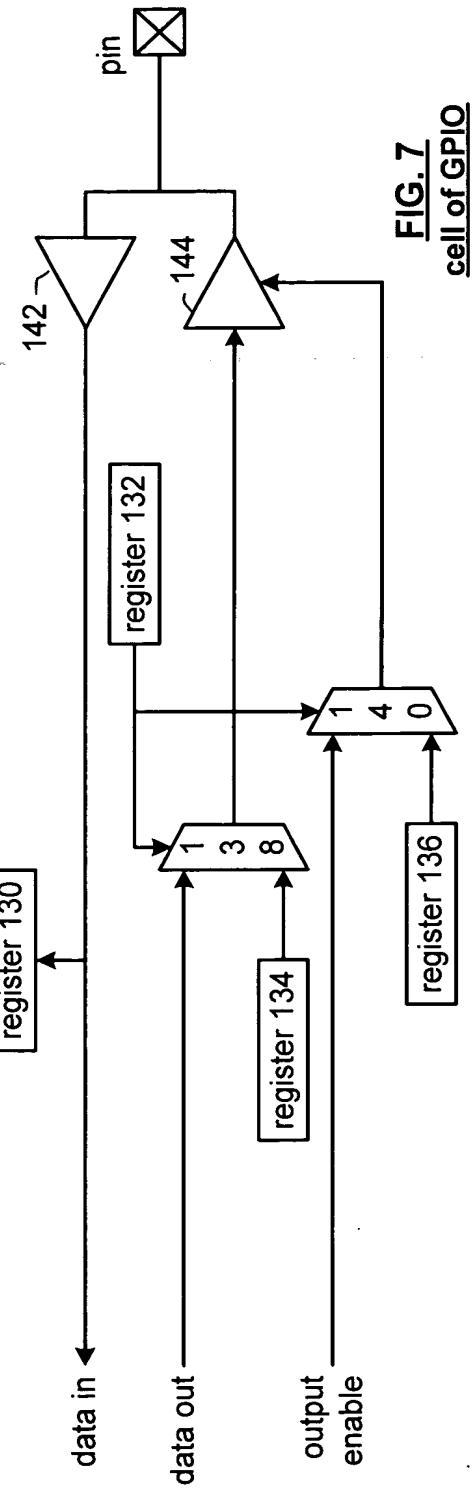


FIG. 7
cell of GPIO

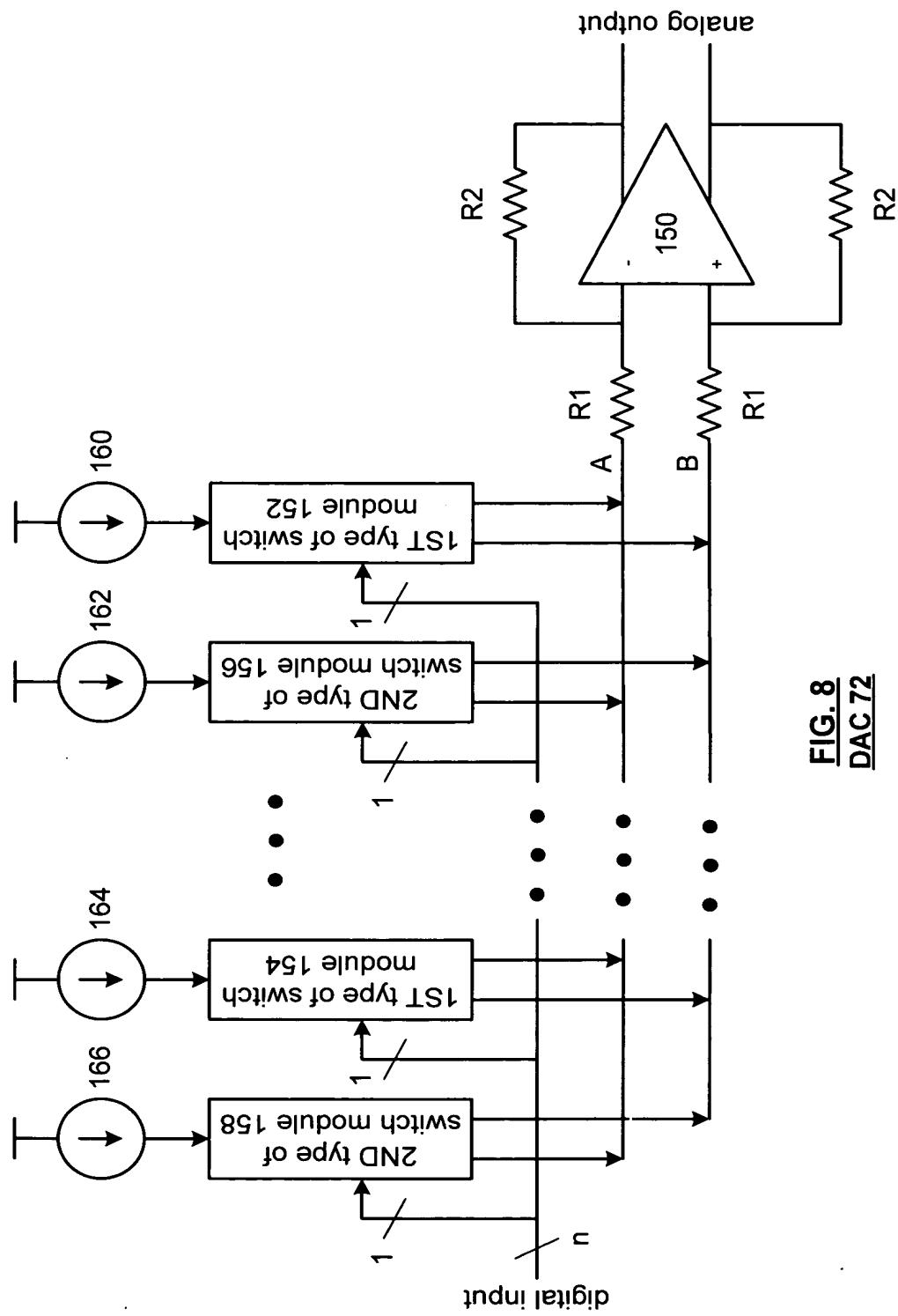


FIG. 8
DAC 72

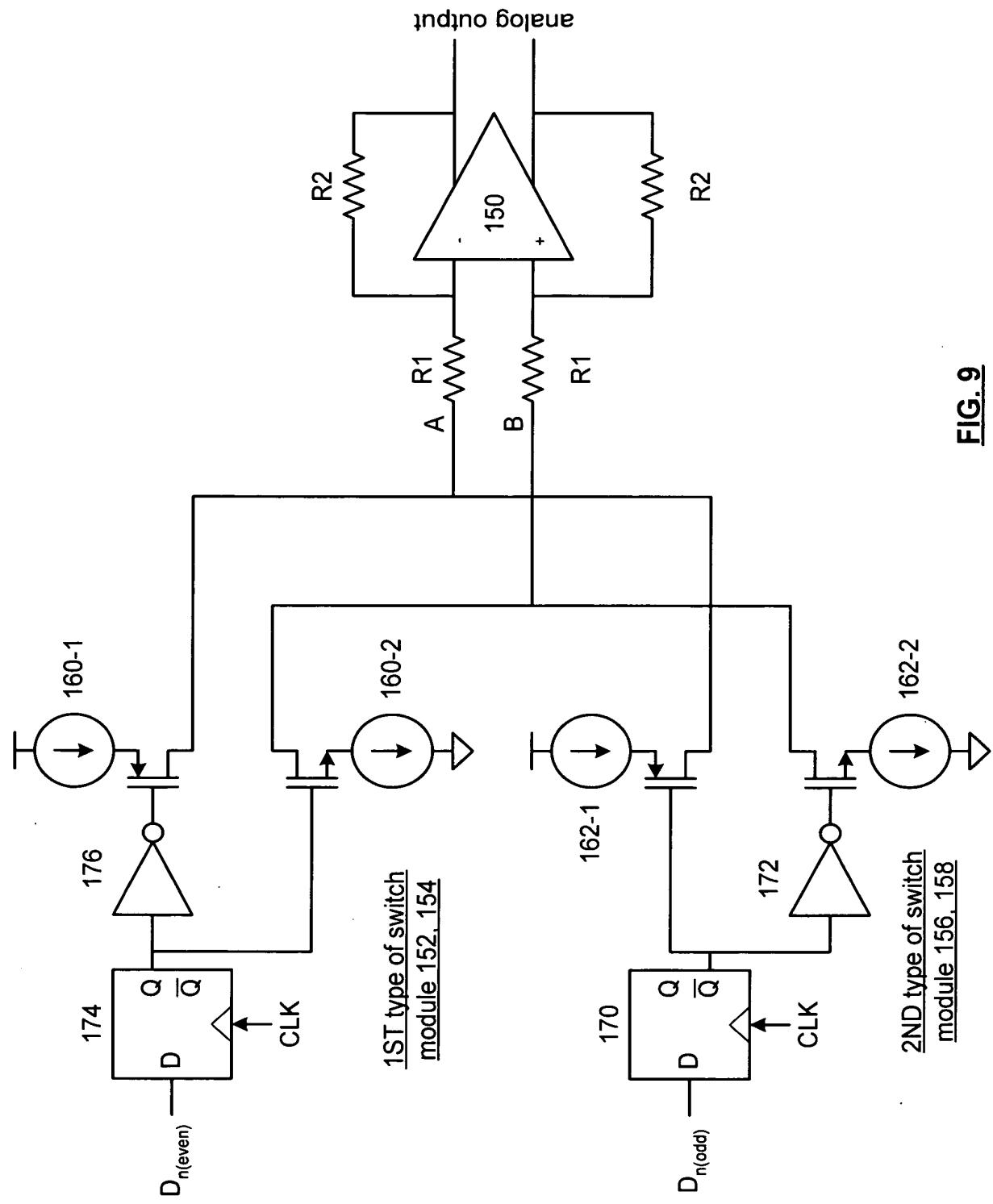


FIG. 9

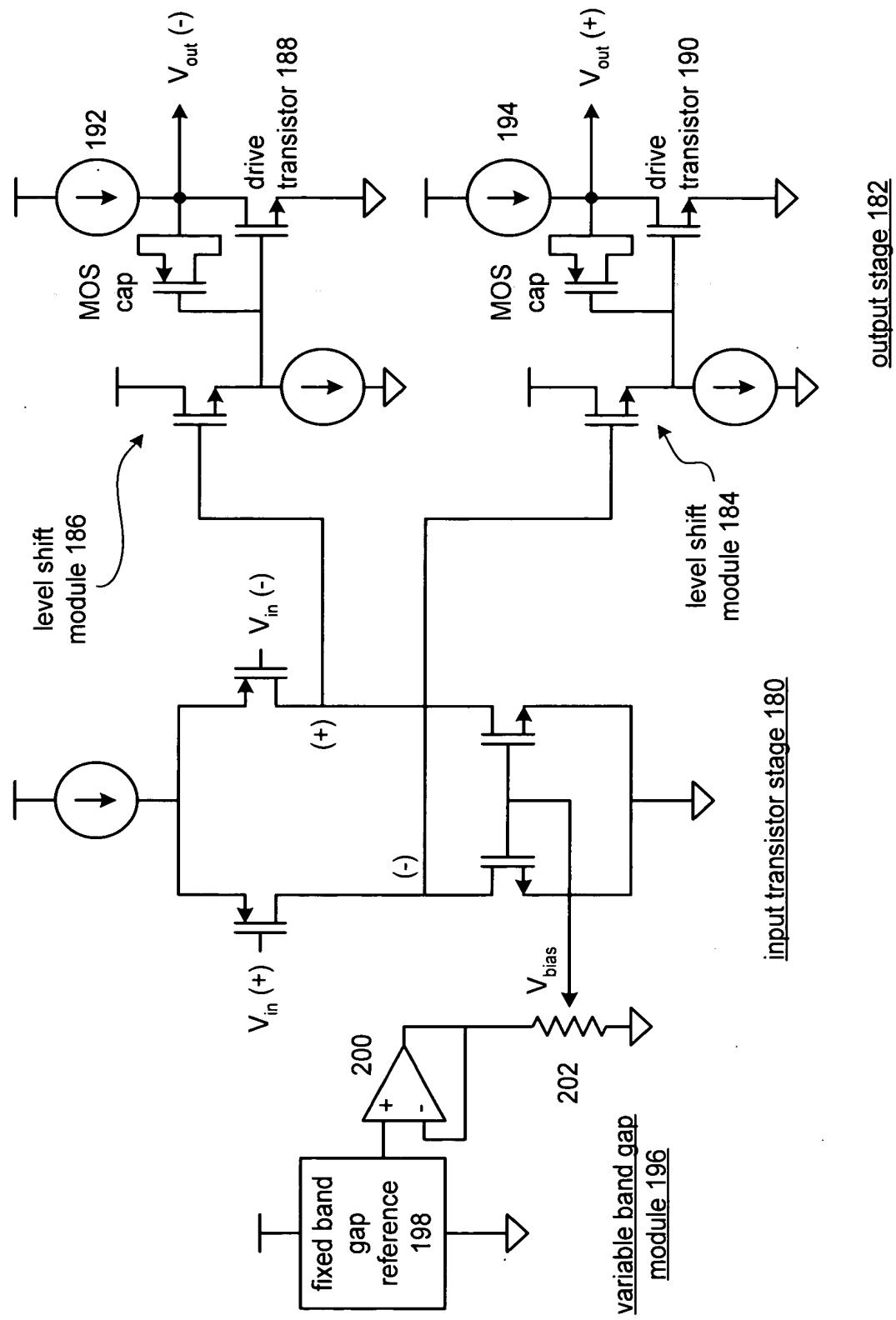


FIG. 10
op amp 150

output stage 182

input transistor stage 180

variable band gap
module 196

fixed band
gap
reference
198

202
 V_{bias}

200

200

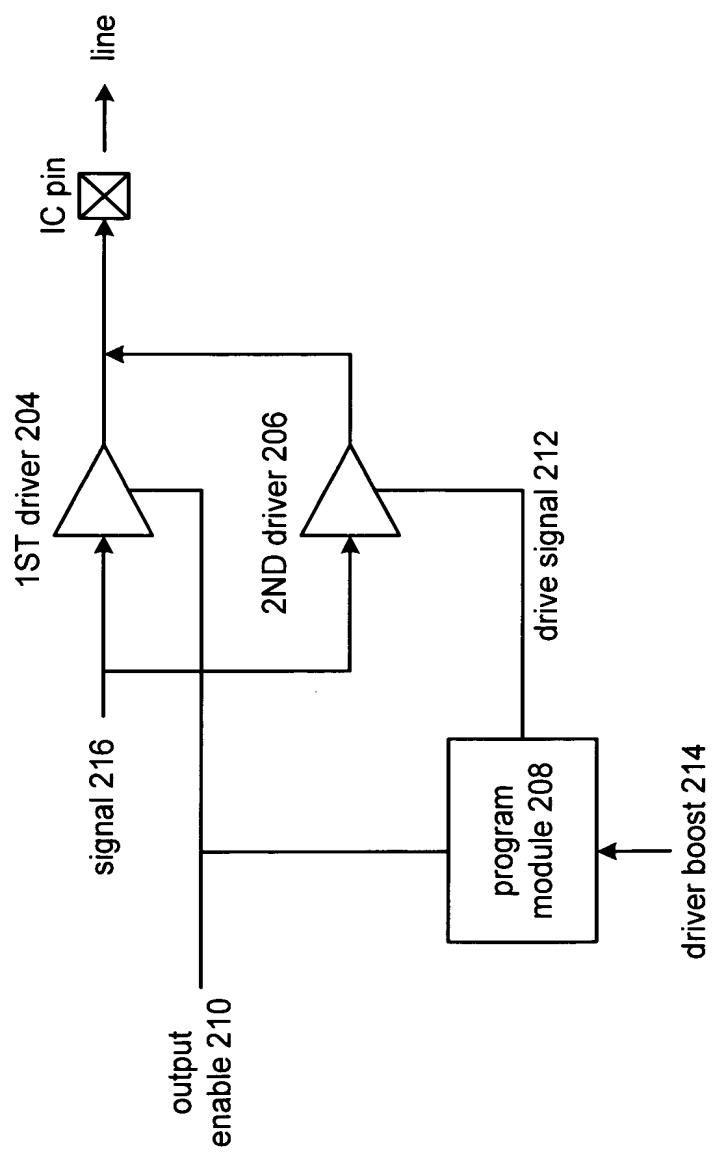


FIG. 11
programmable driver 92

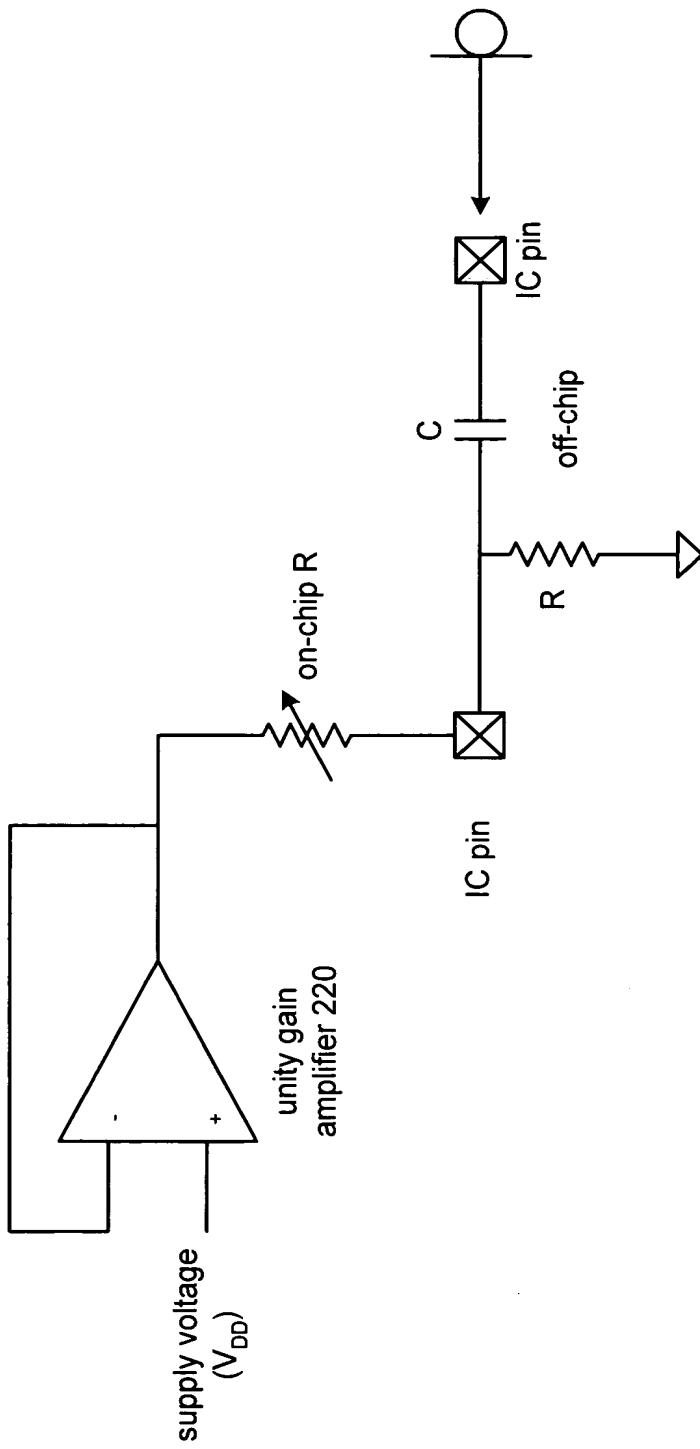


FIG. 12
microphone bias 96

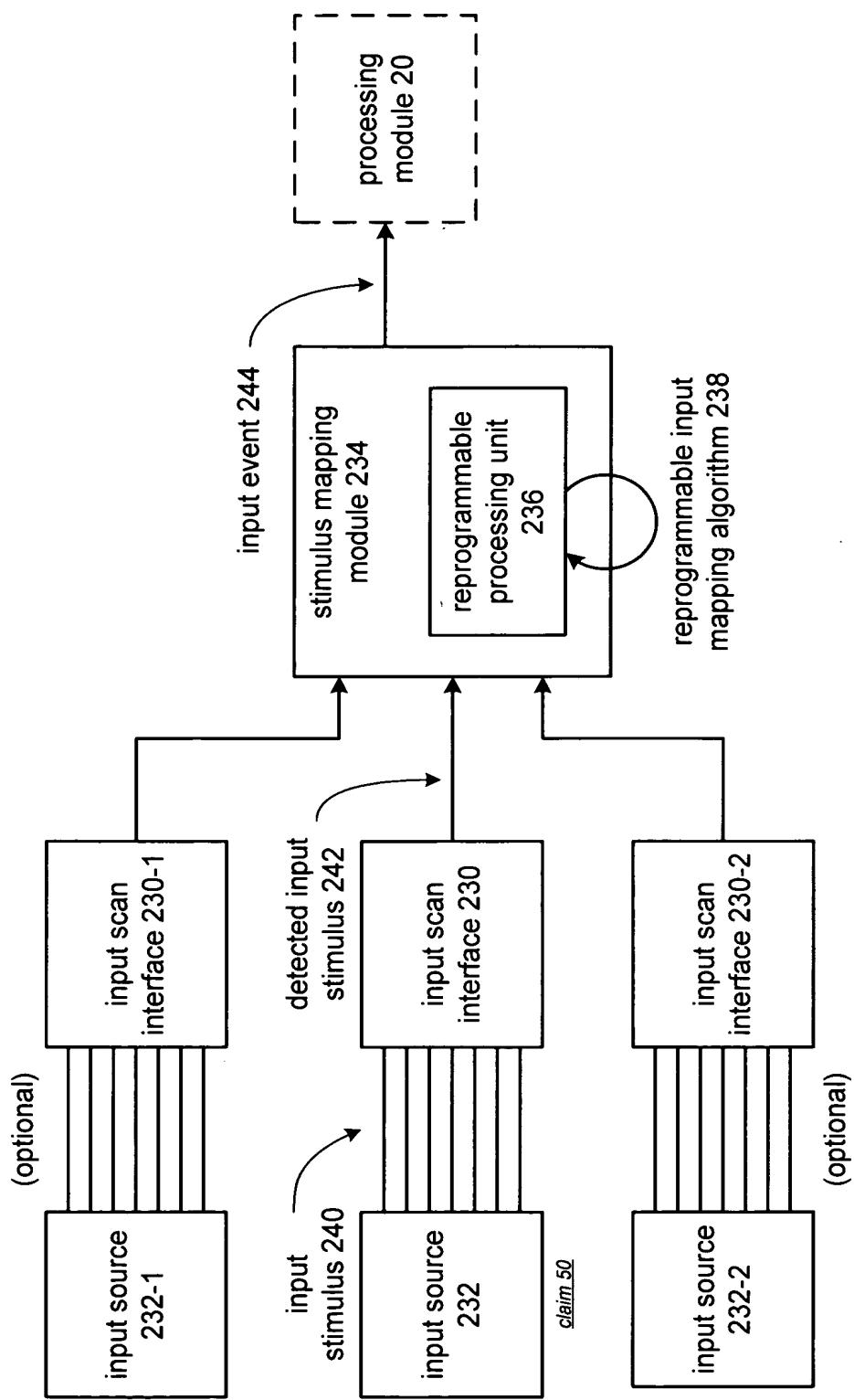


FIG. 13
input interface 90

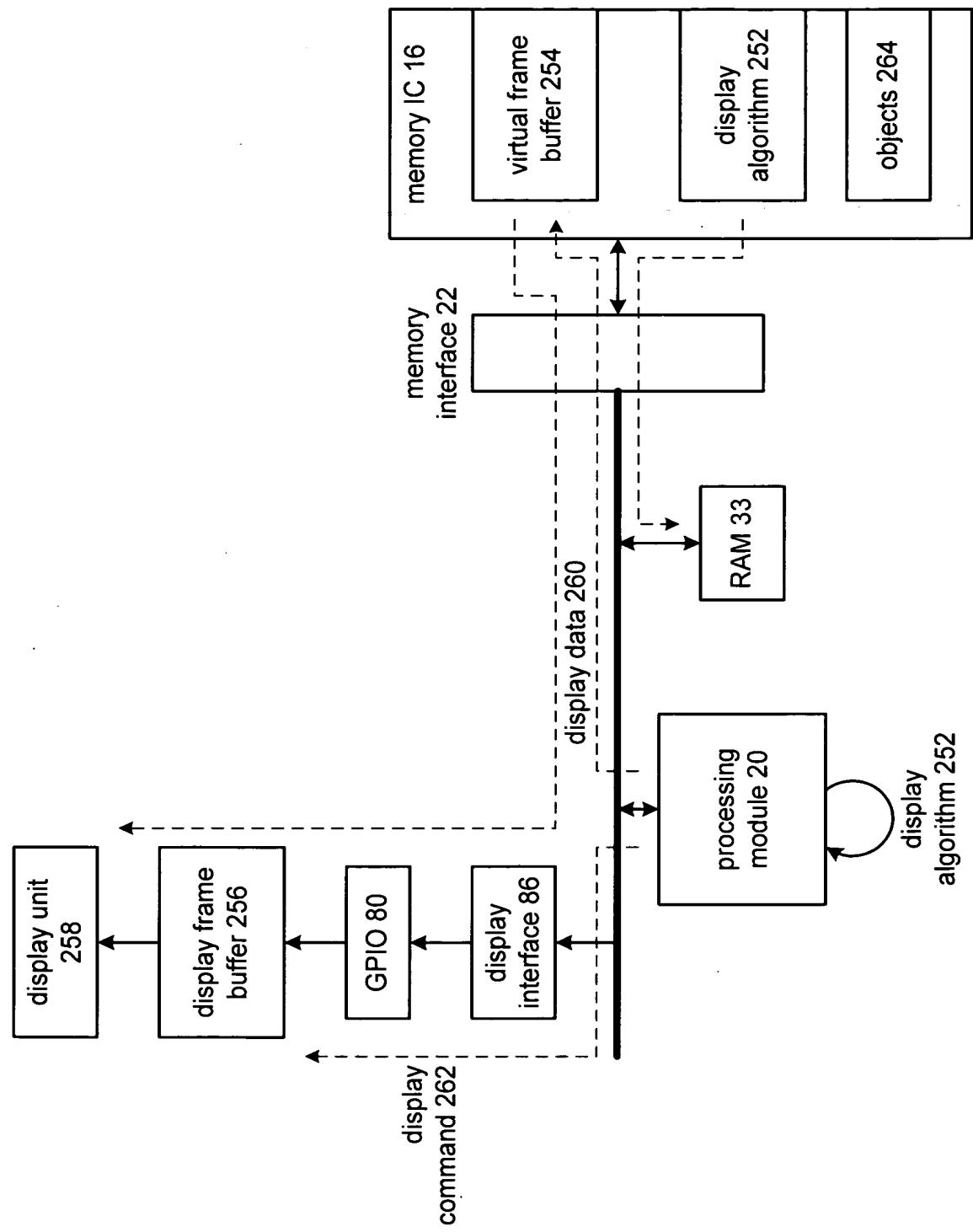


FIG. 14
display interface system 250

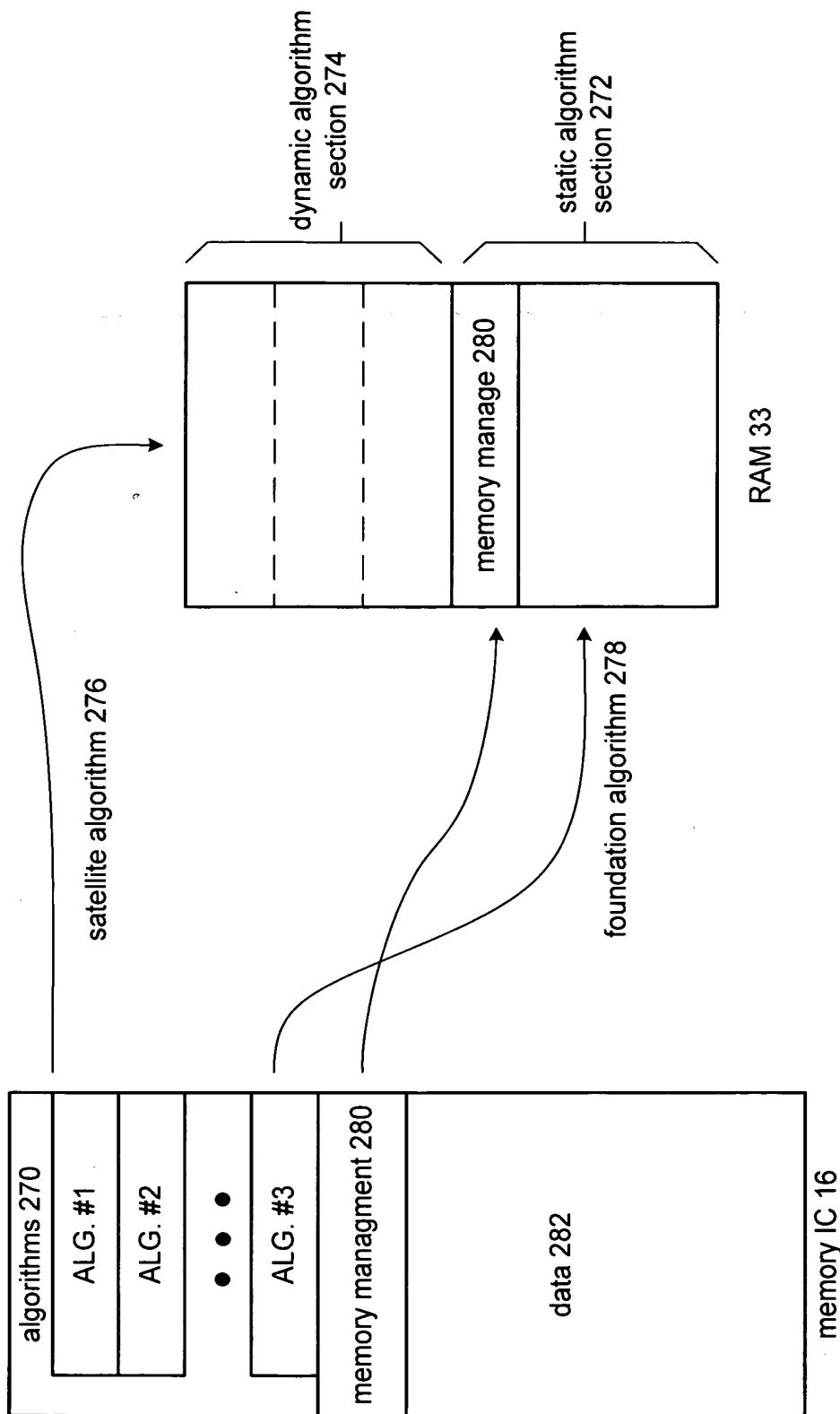


FIG. 15

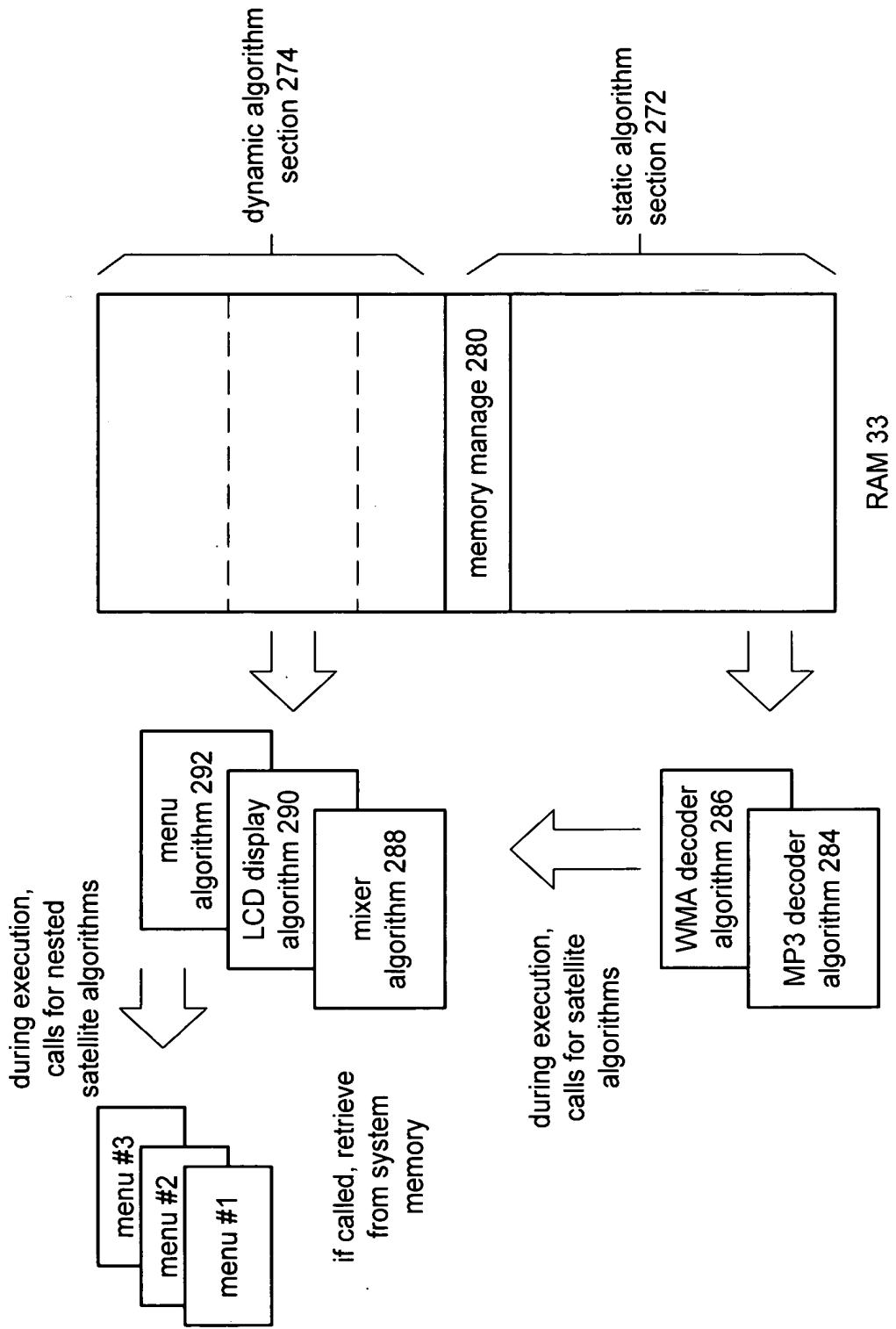


FIG. 16

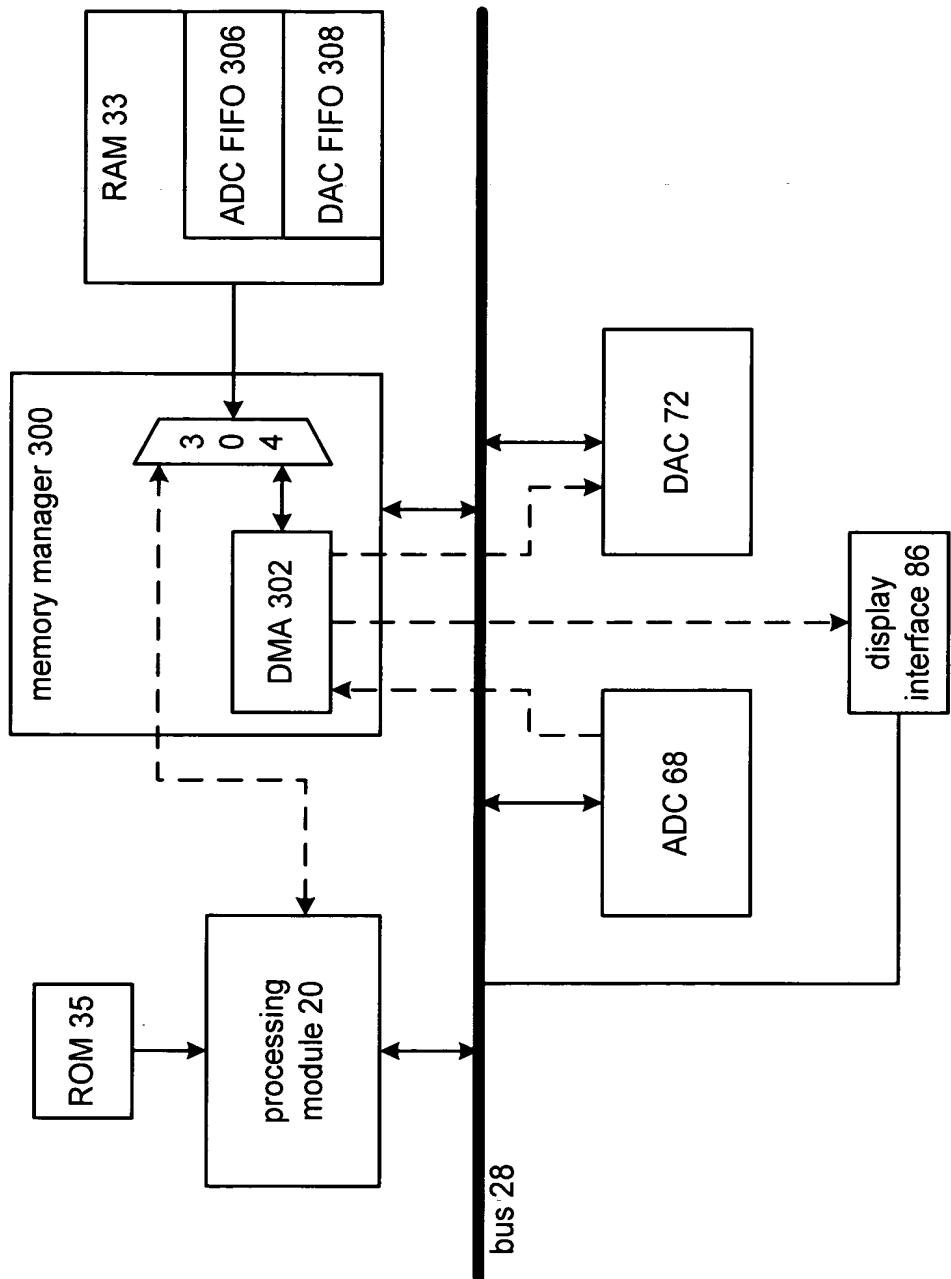


FIG. 17

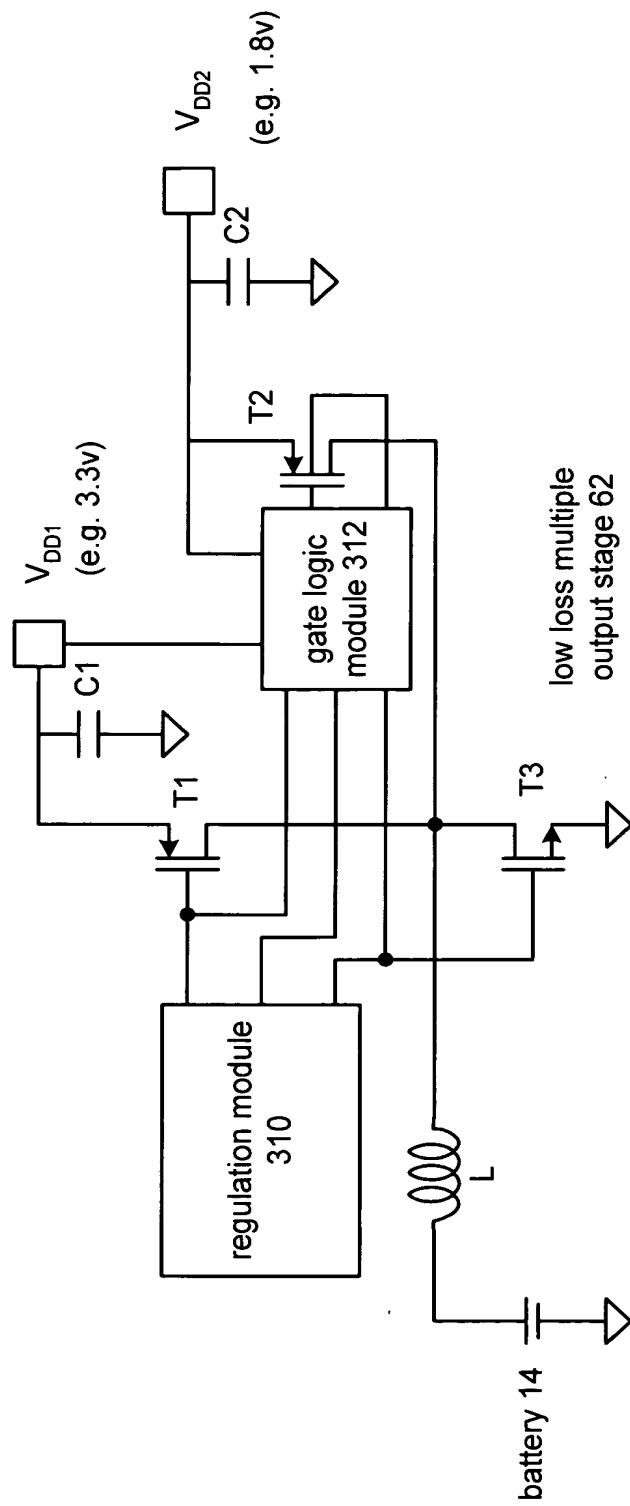
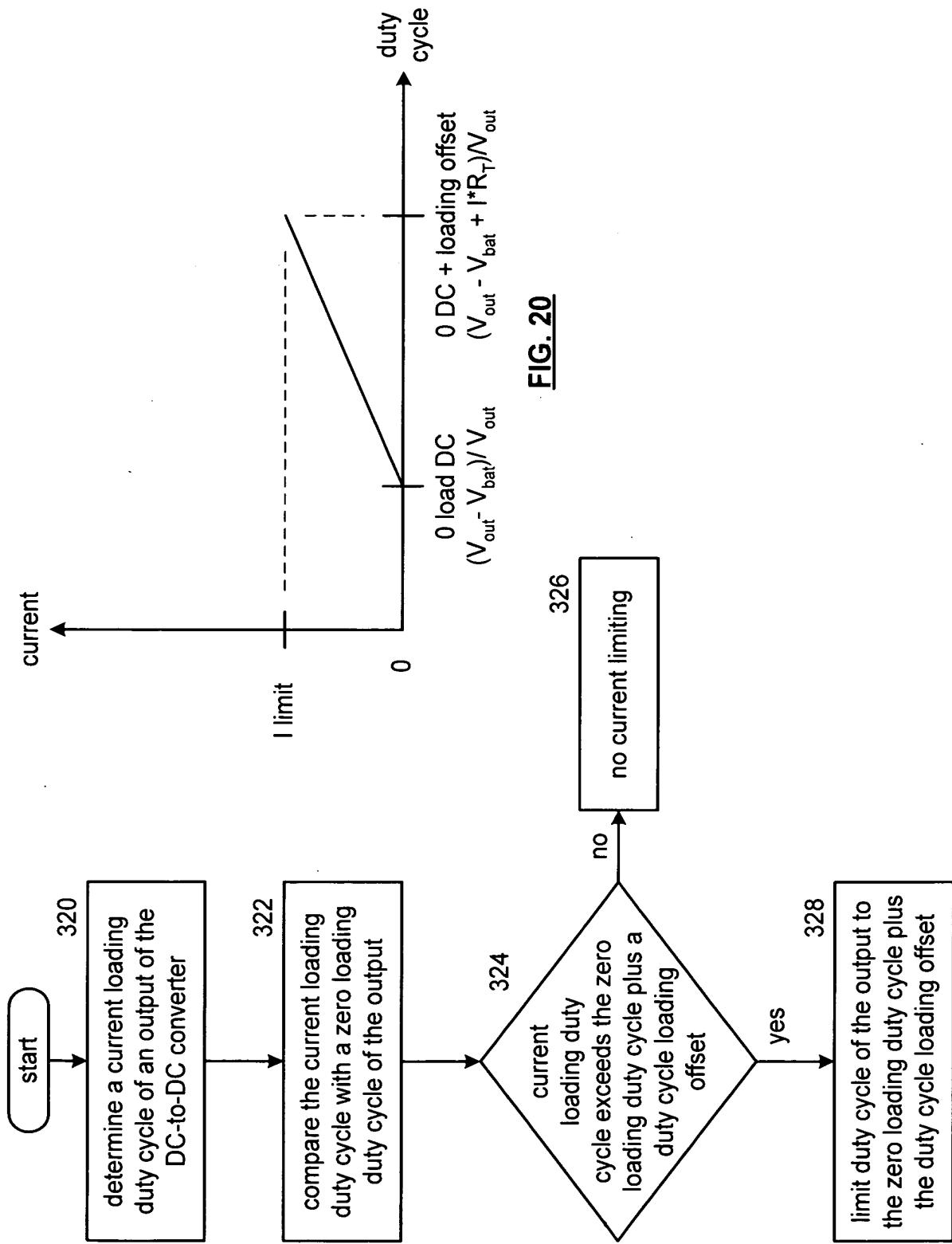


FIG. 18
DC to DC converter 26



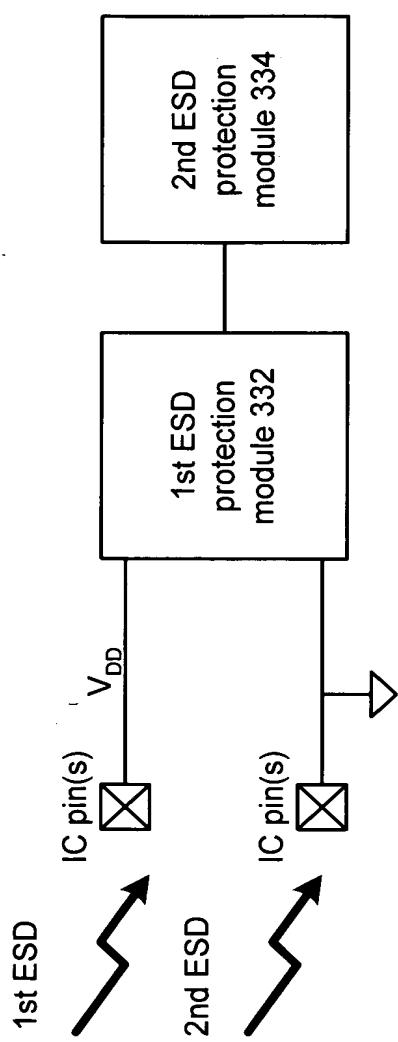


FIG. 21
ESD protection circuit 330

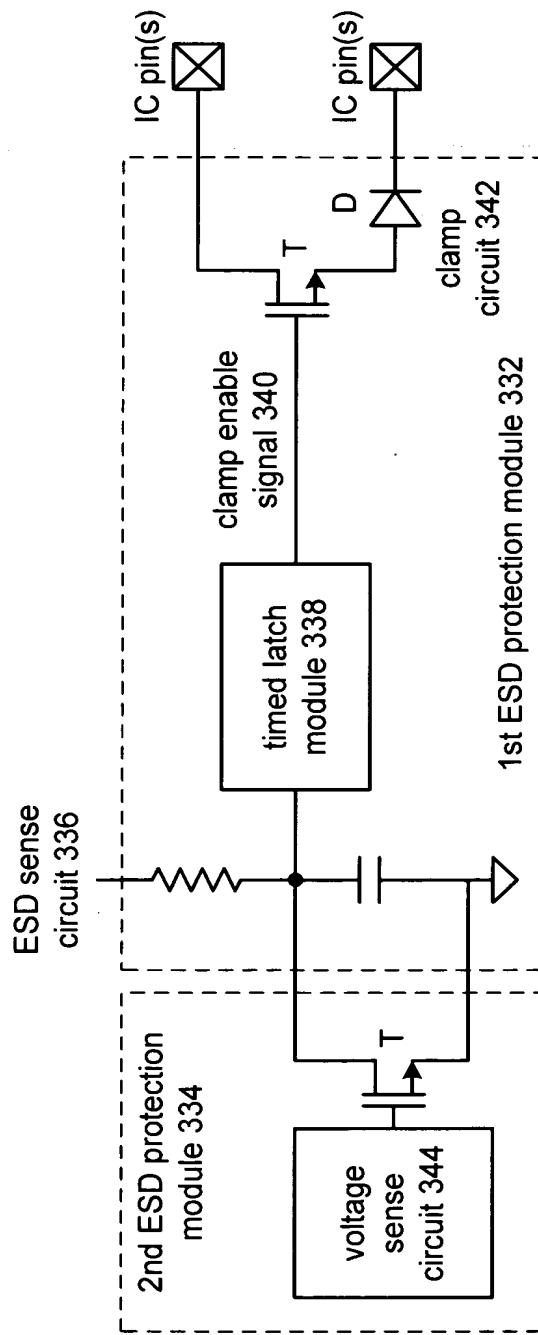


FIG. 22
ESD protection circuit 335

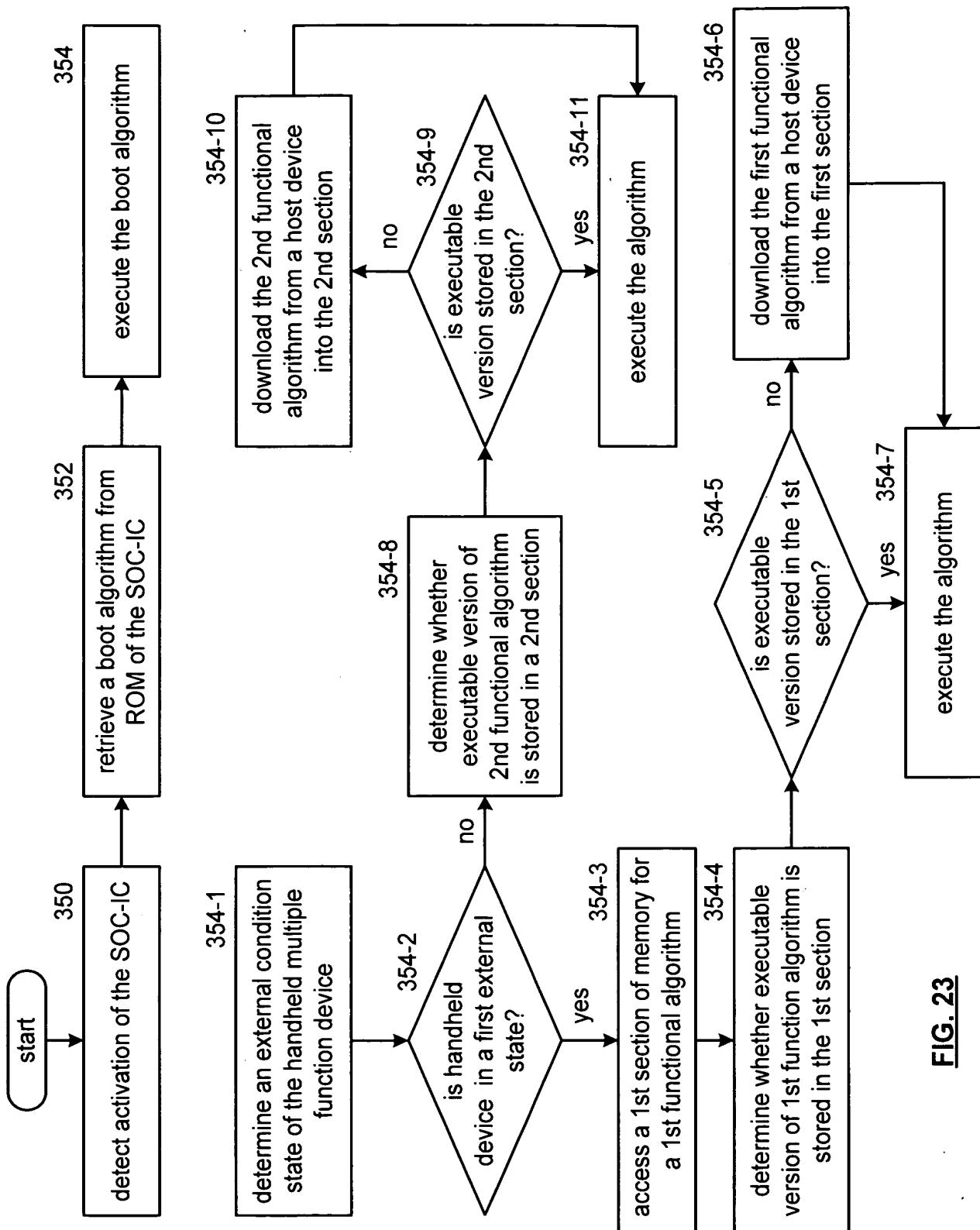


FIG. 23

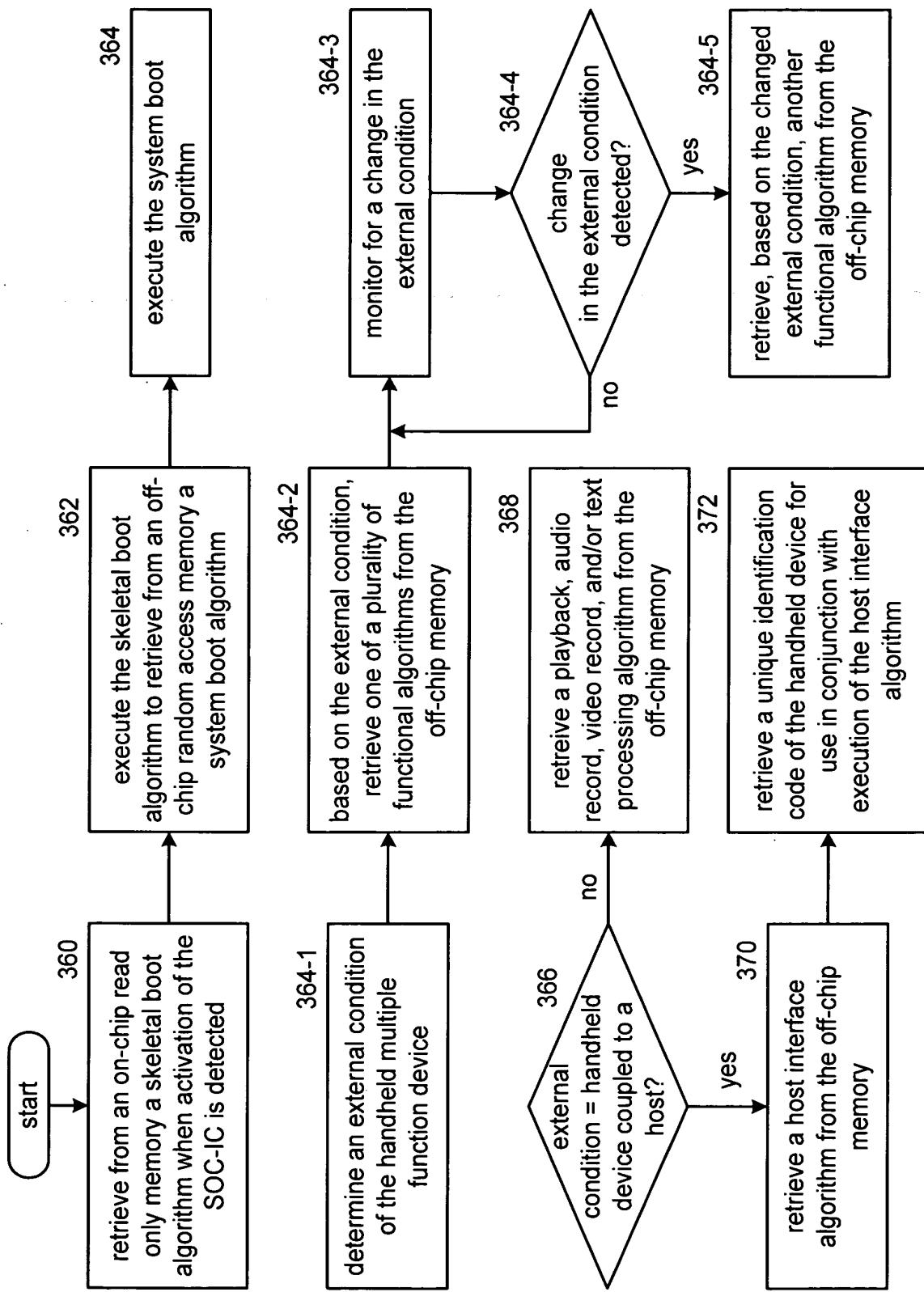
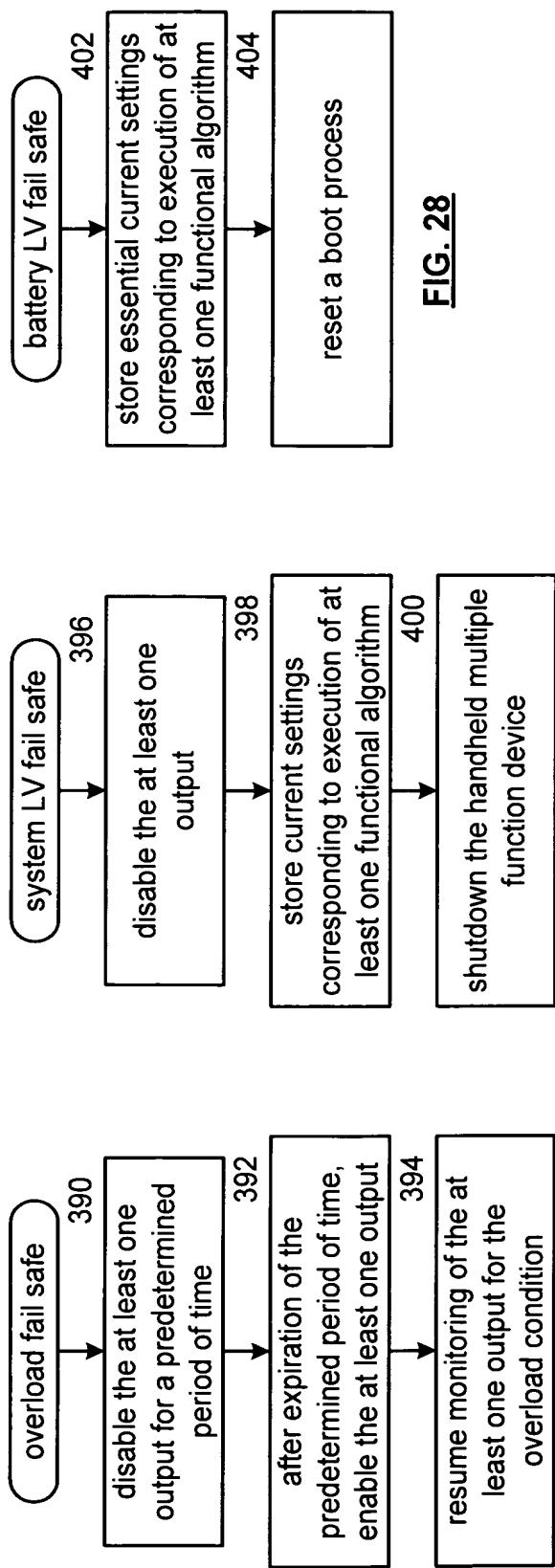
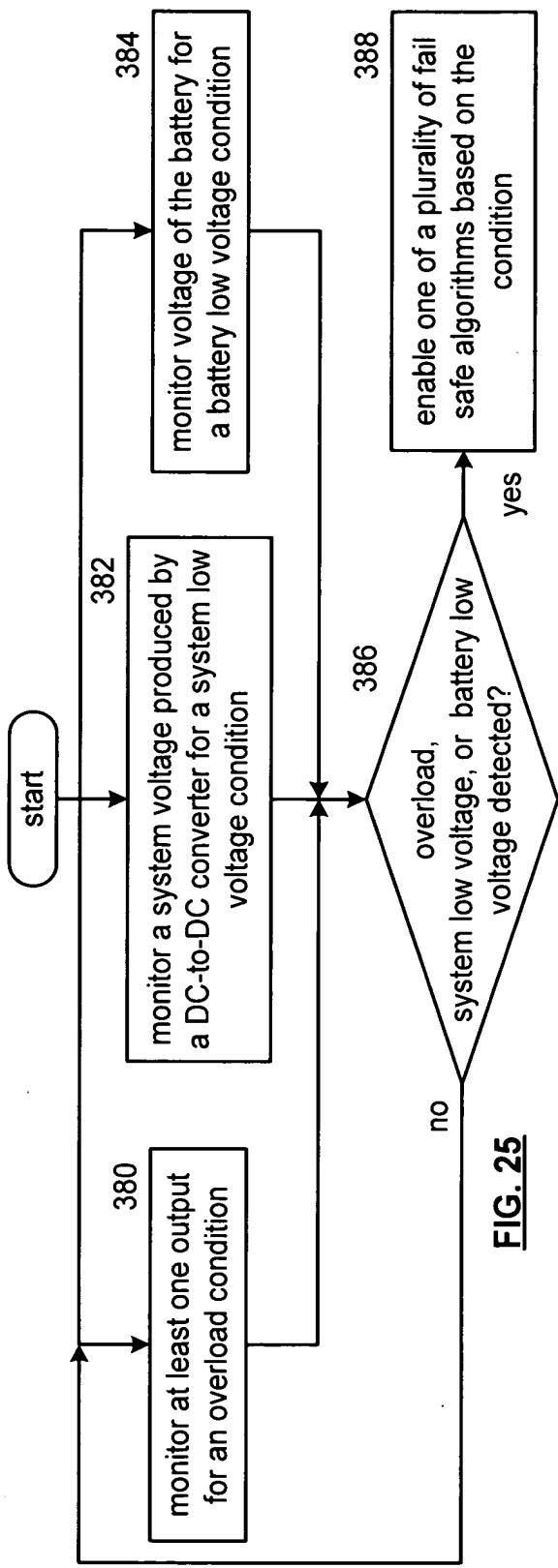


FIG. 24



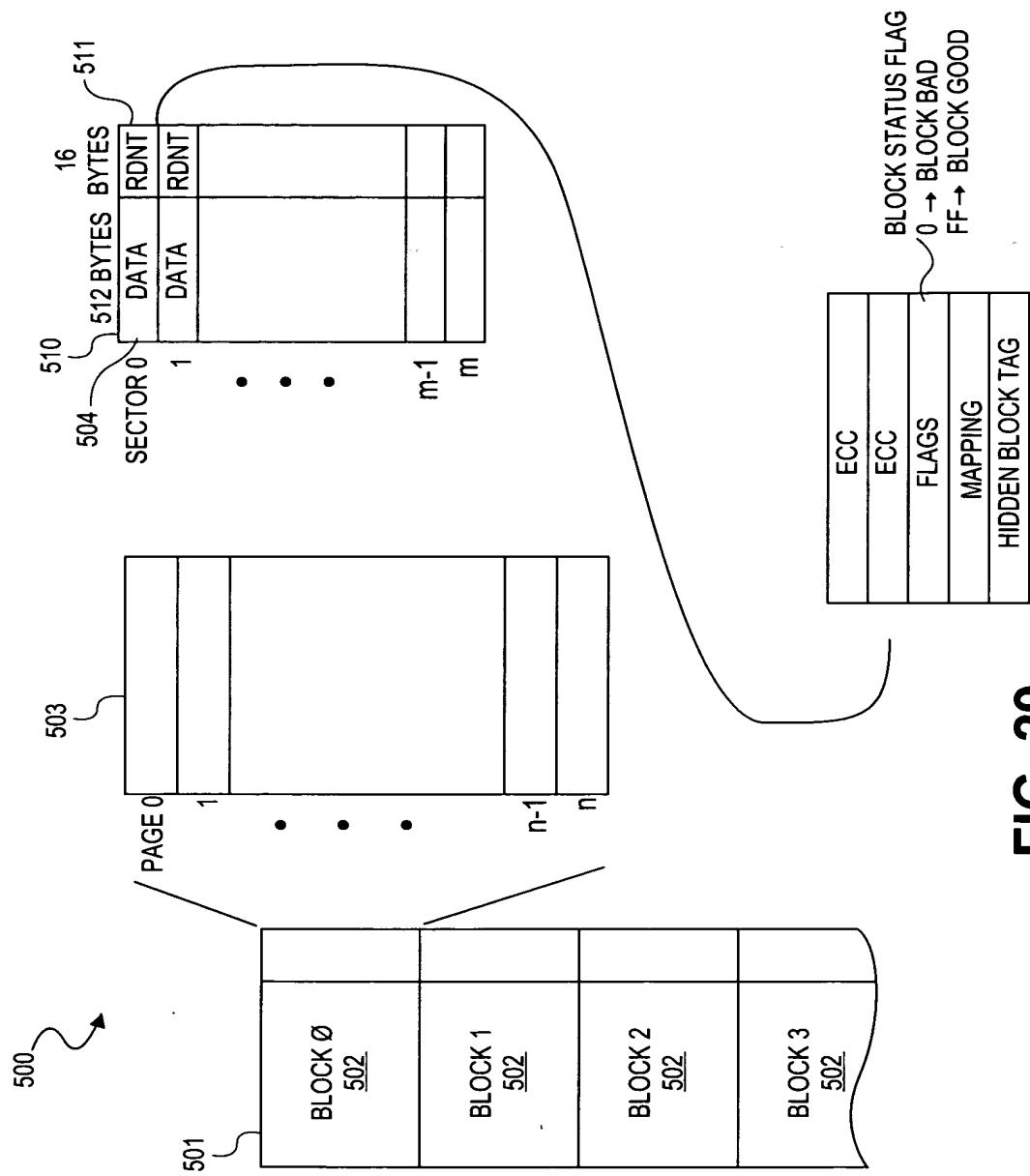


FIG. 29

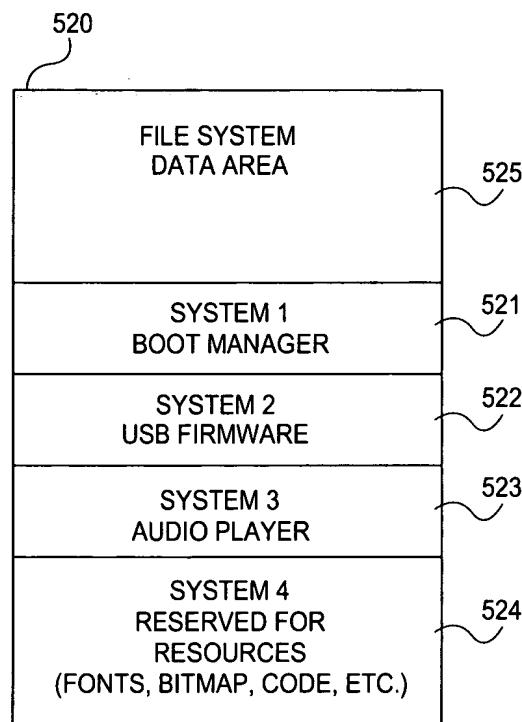


FIG. 30

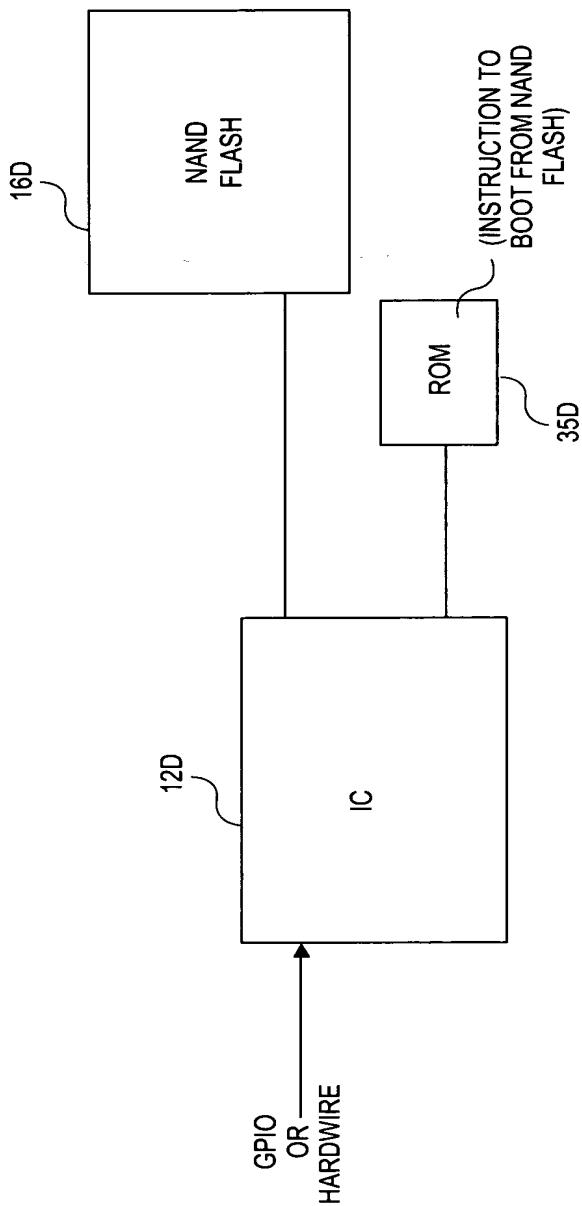


FIG. 31

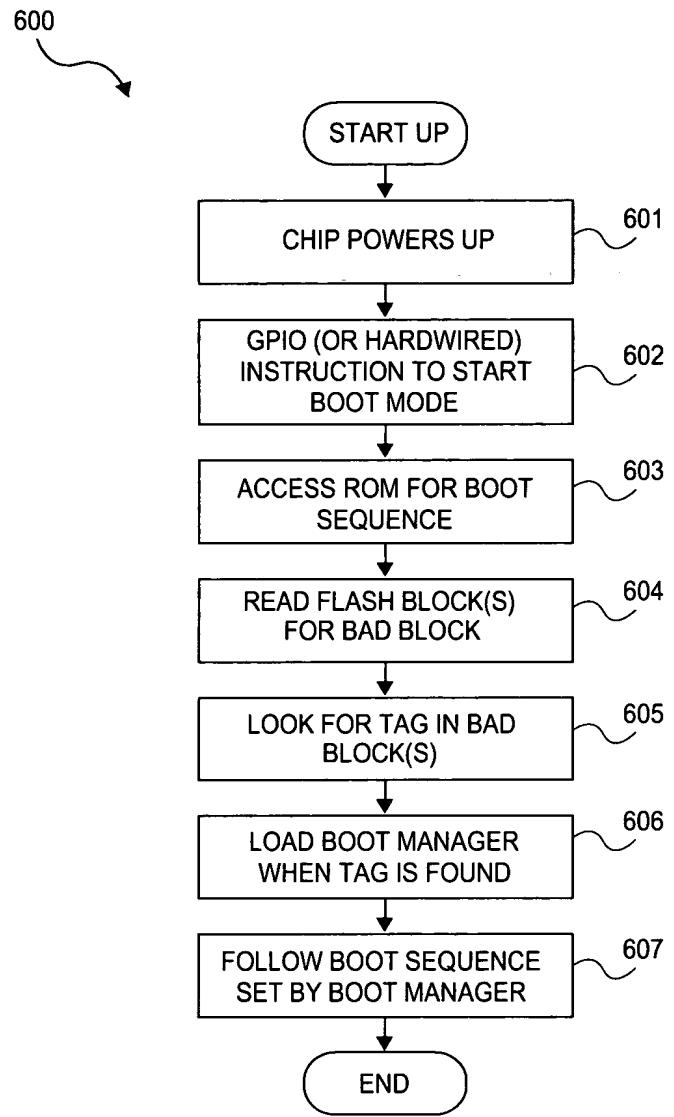


FIG. 32